SUBJECT INDEX

Abnormalities, Vitamin E and Membrane, in Red Cells of Sickle Cell Disease Patients and Newborn Infants, 461–463
Abnormality, Antioxidant, in Stress-Susceptible Pig: Effect of Vitamin E Supplementation, 322–334
Acid Concentrations, Polyunsaturated Fatty, Vitamin E, and Glutathione Peroxidase of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
Acid Oxidation, Arachidonic, by way of 5-Lipoxygenase Pathway; Role of Vitamin E and Selenium on, 136–145
Acid-Reactive Substance (TBA-RS), Thiobarbituric, Glutathione Levels, and Tissue α-Tocopherol in Rats Fed Algal Proteins, 478–479
Acids
  Free Fatty, Lysophospholipids, and Phospholipase A; Tocopherol Stabilizes Membrane against, 121–135
  n-6 Polyunsaturated Fatty; effect of Vitamin E on Immunosuppressive Effects of, 412–414
Activated Neutrophil-Induced Membrane Damage in Vitamin E-Deficient Erythrocytes, 428–430
Activation Evidenced, Neutrophil, by Plasmatic Myeloperoxidase Release during Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status, 501–502
Administered, Vitamin E, and Blood Level; Relationship between Dose of, 421–424
Administered α-Tocopherol against Hepatic Damage Caused by Ischemia-Reperfusion or Endotoxemia; Protective Effect of, 208–218
Adult Respiratory Distress Syndrome; Evaluation of Vitamin E Deficiency in Patients with, 498–500
Adults with or without Fat Malabsorption; Neuropathies, 170–175
Age-Related Health Problems, 358–405
Aged; Effect of Vitamin E Supplementation on Immune Responsiveness of, 283–290
Algal Proteins, Rats Fed; Tissue α-Tocopherol, Thiobarbituric Acid-Reactive Substance (TBA-RS), and Glutathione Levels in, 478–479
All-Racemic and *RRR* Alpha-Tocopherol Acetate in Human Blood Components; Pharmacokinetic Modeling and Bioavailability, 406–408
Androgens, Serum, in Rats; Alpha-Tocopherol Ingestion from Birth and Its Effects on, 518–520
Angina in Scottish Men relative to Low Plasma Vitamins E and C: Increased Risk of, 291–295
Animal Model; Vitamin E and Cancer Prevention, 383–390
Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol; Oxygen Free Radical-Mediated Heart Injury in, 237–253
Anticarcinogen; Vitamin E, 417–420
Antioxidant(s)
  High-Dosage, in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of Parkinson's Disease and Pilot Trial of, 186–196
  in Membranes as Studied by Spin Labeling; Mode of Action of Vitamin E as, 521–523
  in Vitro and *in Vivo*; Vitamin E, 7–22
  relative to Biochemical Evidence of Lipoperoxidation In Venous Stasis Ulcer: Beneficial Role of Vitamin E as, 506–508
Antioxidant Abnormality in Stress-Susceptible Pig: Effect of Vitamin E Supplementation, 322–334
Antioxidant and Chemistry Functions, 7–84
Antioxidant Status of Smokers and Nonsmokers: Effects of Vitamin E Supplementation, 435–438
Antioxidant Therapy and Uptake of Human Oxidized LDL by Macrophages, 447–448
Arachidonic Acid Oxidation by way of 5-Lipoxygenase Pathway; Role of Vitamin E and Selenium on, 136–145

Babies, Preterm, by Vitamin E Supplementation; Prophylaxis of Periventricular Hemorrhage in, 197–204
Beneficial Role of Vitamin E as Antioxidant relative to Biochemical Evidence of Lipoperoxidation In Venous Stasis Ulcer, 506–508
Benefits, Biochemistry and Health, relative to Vitamin E: Introduction to, 1–6
Beta-Carotene and Alpha-Tocopherol by High-Dose Radiochemotherapy Preceding Bone Marrow Transplantation; Decrease of, 431–434
Bilayer, Phospholipid, of Erythrocyte Membrane in Presence of α-Tocopherol; Dynamic Properties of, 409–411
Bilirubin Production and Vitamin E Pharmacokinetics in Premature Neonates; Continuous Parenteral Infusion of, 352–357
Bioavailability and Pharmacokinetic Modeling of *RRR* and *All-Racemic* Alpha-Tocopherol Acetate in Human Blood Components, 406–408
Biochemical Evidence of Lipoperoxidation In Venous Stasis Ulcer: Beneficial Role of Vitamin E as Antioxidant, 506–508
Biochemistry: Intracellular Transport and Membrane Function, 85–145
Biochemistry and Health Benefits relative to Vitamin E: Introduction, 1–6
Biological Activity, Tissue Uptake, and Prostaglandin Biosynthesis; Relationship of Tocopherol Structure to, 72–84
Biomembranes by Tocopherol; Inhibition of Oxidation of, 23–31
Biosynthesis, Prostaglandin, Biological Activity, and Tissue Uptake; Relationship of Tocopherol Structure to, 72–84
Birth and Its Effects on Serum Androgens in Rats; Alpha-Tocopherol Ingestion from, 518–520
Blood Components, Human; Pharmacokinetic Modeling and Bioavailability of *RRR* and *All-Racemic* Alpha-Tocopherol Acetate in, 406–408
Blood Level and Vitamin E Administered; Relationship between Dose of, 421–424
Bone Marrow Transplantation, High-Dose Radiochemotherapy Preceding; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
Brain Injury after Ischemia and Trauma: Role of Vitamin E, 219–236
Bypass, Cardiopulmonary, in Humans: Consequence on Vitamin E Status; Neutrophil Activation Evidenced by Plasmatic Myeloperoxidase Release during, 501–502
Bypass Surgery in Humans: Effects of α-Tocopherol; Oxygen Free Radical-Mediated Heart Injury in Animal Models and during, 237–253

Calves, Selenium-Deficient, and Vitamin E-; Selective Damage to Cardiac Conduction System in, 467–469
Cancer and Vitamin E Prevention in Animal Model, 383–390
Cancer Mortality and Vitamin E Status, 391–399
Cardiac Conduction System in Vitamin E- and Selenium-Deficient Calves; Selective Damage, 467–469
Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status; Neutrophil Activation Evidenced by Plasmatic Myeloperoxidase Release during, 501–502
Cardiovascular Disease relative to Ischemia-Reperfusion Injury, 208–282
Carotenoids and Vitamin E in Preventing Oxidation of Low Density Lipoproteins; Role of, 254–267
Cataractogenesis: IX. Activity, Modeling Cortical, of Vitamin E and Esters in Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats, 358–371
Cataracts
  in Humans; Vitamin E Intake and Risk, 372–382
  Preventing, and γ-Crystallin Leakage from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in, 358–371
Causative Factor in Equine Degenerative Myeloencephalopathy; Vitamin E Deficiency, 415–416
Cell Disease Patients, Sickle, and Newborn Infants; Vitamin E and Membrane

Abnormalities in Red Cells of, 461–463
Cells, Red, of Sickle Cell Disease Patients and Newborn Infants; Vitamin E and Membrane Abnormalities in, 461–463
Chemistry and Antioxidant Functions, 7–84
Chemoluminescence, NADH-Dependent, by Isolated Rat Liver Nuclei; Vitamin E Prevents NADPH-Dependent but not, 503–505
Children with Fat Malabsorption: Studies in Cystic Fibrosis and Chronic Cholestasis; Vitamin E Deficiency Neuropathy in, 156–169
Cholestasis, Chronic, and Cystic Fibrosis relative to Vitamin E Deficiency Neuropathy in Children with Fat Malabsorption: Studies in, 156–169
Cigarette-Smoked Rats, Chronic; Increased Vitamin E Content in Lungs of, 425–427
Compared with γ-Tocopherol Is Preferentially Secreted in Human Lipoproteins; α-Tocopherol as, 95–108
Competitive Uptake of Deuterium-Labeled α-Tocopherols in Male Rats, 533–536
Concentration, Weight and Alpha-Tocopherol, of Tissues in Rats; Effects of Dietary Restriction on, 455–457
Concentrations
  Polyunsaturated Fatty Acid, Vitamin E, and Glutathione Peroxidase of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
  Tocopherol, of Leukocytes in Neonates, 487–490
Conduction System, Cardiac, in Vitamin E- and Selenium-Deficient Calves; Selective Damage to, 467–469
Continuous Parenteral Infusion of Vitamin E Pharmacokinetics and Bilirubin Production in Premature Neonates, 352–357
Cooperative Protection by Vitamins E and C of Human Erythrocyte Membranes against Peroxidation, 527–529
Cortical Cataractogenesis: IX. Activity, Modeling, of Vitamin E and Esters in Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats, 358–371
Cross-Cultural Epidemiology; Plasma Vitamins E and Inversely Correlated to Mortality from Ischemic Heart Disease in, 268–282
γ-Crystallin Leakage and Preventing Cataracts from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in, 358–371
Cystic Fibrosis and Chronic Cholestasis relative to Vitamin E Deficiency Neuropathy in Children with Fat Malabsorption: Studies in, 156–169
Cytosol, Hepatic; Tocopherol-Binding Proteins, 85–94

Damage
  Activated Neutrophil-Induced Membrane, in Vitamin E-Deficient Erythrocytes, 428–430
  Selective, to Cardiac Conduction System in Vitamin E- and Selenium-Deficient Calves, 467–469
Damage Caused, Hepatic, by Ischemia-Reperfusion or Endotoxemia; Protective Effect of Administered α-Tocopherol against, 208–218
Defending against Peroxidation relative to Oxygen-Induced Retinopathy in Rat: Role of Vitamin E in, 495–497
Deficiency
  Vitamin E
    as Causative Factor in Equine Degenerative Myeloencephalopathy, 415–416
    in Patients with Adult Respiratory Distress Syndrome; Evaluation of, 498–500
Deficiency Neuropathy, Vitamin E, in Children with Fat Malabsorption: Studies in Cystic Fibrosis and Chronic Cholestasis, 156–169
Degenerative Myeloencephalopathy, Equine; Vitamin E Deficiency as Causative Factor in, 415–416
Delivery, α-Tocopherol, to Tissues; Role of Low Density Lipoprotein Receptor for, 61–71
Density Lipoprotein Receptor, Low, for α-Tocopherol Delivery to Tissues; Role of, 61–71
Density Lipoproteins, Low; Role of Vitamin E and Carotenoids in Preventing Oxidation of, 254–267

Deuterium-Labeled α-Tocopherols in Male Rats; Competitive Uptake, 533–536
Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in Preventing Cataracts and γ-Crystallin Leakage from Lenses in, 358–371
Dietary Restriction on Weight and Alpha-Tocopherol Concentration of Tissues in Rats; Effects of, 455–457
Dietetic Microangiopathy; Vitamin E, Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of Heart and Liver in Swine with, 509–510
Disease
  Cardiovascular, relative to Ischemia-Reperfusion Injury, 208–282
  Ischemic Heart, in Cross-Cultural Epidemiology; Plasma Vitamins E and Inversely Correlated to Mortality from, 268–282
  Parkinson's
    and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of, 186–196
    Retrospective Evaluation of Vitamin E Therapy in, 441–442
Disease Patients, Sickle Cell, and Newborn Infants; Vitamin E and Membrane Abnormalities in Red Cells of, 461–463
Disease Resistance, Vitamin E, and Immune Response, 335–344
Disorders, Neuroleptic-Induced Movement: Evidence from Treatment of Tardive Dyskinesia with Vitamin E; Possible Involvement of Free Radicals in, 176–185
Distress Syndrome, Adult Respiratory; Evaluation of Vitamin E Deficiency in Patients with, 498–500
Dose of Vitamin E Administered and Blood Level; Relationship, 421–424
Dynamic Properties of Phospholipid Bilayer of Erythrocyte Membrane in Presence of α-Tocopherol, 409–411
Dysfunctions, Retrovirus-Induced Immune, and Tumor-Cell Proliferation; Vitamin E Modulation of, 470–473
Dyskinesia, Tardive, with Vitamin E relative to Possible Involvement of Free Radicals in Neuroleptic-Induced Movement Disorders: Evidence from Treatment of, 176–185

Endogenous Toxin Hypothesis of Etiology of Parkinson's Disease and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness, 186–196
Endotoxemia; Protective Effect of Administered α-Tocopherol against Hepatic Damage Caused by Ischemia-Reperfusion or, 208–218
Environmental Stresses; Protection, 283–357
Enzymes, Membrane-Bound: Pathological Significance of Heme-Related Metabolites; Photooxidative Inactivation of, 458–460
Epidemiology, Cross-Cultural; Plasma Vitamins E and Inversely Correlated to Mortality from Ischemic Heart Disease in, 268–282
Equine Degenerative Myeloencephalopathy; Vitamin E Deficiency as Causative Factor, 415–416
Erythrocyte Membrane in Presence of α-Tocopherol; Dynamic Properties of Phospholipid Bilayer of, 409–411
Erythrocyte Membranes, Human, against Peroxidation; Cooperative Protection by Vitamins E and C of, 527–529
Erythrocytes, Vitamin E-Deficient; Activated Neutrophil-Induced Membrane Damage, 428–430
Esters and Vitamin E in Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of, 358–371
Etiology of Parkinson's Disease and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of, 186–196
Evaluation
  of Vitamin E Deficiency in Patients with Adult Respiratory Distress Syndrome, 498–500
  Retrospective, of Vitamin E Therapy in Parkinson's Disease, 441–442
Exercise, Physical; Modulation of Tissue Vitamin E Levels by, 311–321

Factor
Causative, in Equine Degenerative Myeloencephalopathy; Vitamin E Deficiency as, 415–416
Glutathione and Heat-Labile, relative to Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in Hepatic Microsomes: Requirement for, 32–45
Factor (PAF) Synthesis, Increased Platelet-Activating, in Polymorphonuclear Leukocytes of Vitamin E-Deficient Rats, 449–454
Fat Malabsorption
Neuropathies in Adults, 170–175
Studies in Cystic Fibrosis and Chronic Cholestasis; Vitamin E Deficiency Neuropathy in Children with, 156–169
Fatty Acid Concentrations, Polyunsaturated, Vitamin E, and Glutathione Peroxidase of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
Fatty Acids
Free, Lysophospholipids, and Phospholipase A; Tocopherol Stabilizes Membrane against, 121–135
n-6 Polyunsaturated; effect of Vitamin E on Immunosuppressive Effects of, 412–414
Fed Algal Proteins, Rats; Tissue α-Tocopherol, Thiobarbituric Acid-Reactive Substance (TBA-RS), and Glutathione Levels in, 478–479
Fibrosis, Cystic, and Chronic Cholestasis relative to Vitamin E Deficiency Neuropathy in Children with Fat Malabsorption: Studies in, 156–169
First Year of Life; Vitamin E in Preterm Infants during, 443–446
Free Fatty Acids, Lysophospholipids, and Phospholipase A; Tocopherol Stabilizes Membrane against, 121–135
Free Radical-Mediated Heart Injury, Oxygen, in Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol, 237–253
Free Radicals
in Hepatic Microsomes: Requirement for Glutathione and Heat-Labile Factor; Evidence That Alpha-Tocopherol Functions Cyclically to Quench, 32–45
in Neuroleptic-Induced Movement Disorders: Evidence from Treatment of Tardive Dyskinesia with Vitamin E; Possible Involvement of, 176–185
Future Studies relative to Vitamin E: Status of Current Research and Suggestions for, 400–405

Ghosts, RBC, by Vitamins C and E; Synergistic Inhibition of Oxidation in, 474–477
Glutathione and Vitamin E in Protection against Membrane Lipid Peroxidation; Mechanism of Interaction of, 514–517
Glutathione and Heat-Labile Factor relative to Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in Hepatic Microsomes: Requirement for, 32–45
Glutathione Levels, Tissue α-Tocopherol, and Thiobarbituric Acid-Reactive Substance (TBA-RS) in Rats Fed Algal Proteins, 478–479
Glutathione Peroxidase, Polyunsaturated Fatty Acid Concentrations, and Vitamin E of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510

Health and Biochemistry Benefits relative to Vitamin E: Introduction, 1–6
Health and Biochemistry Implications relative to Vitamin E, 00–00
Health Problems, 358–405
Heart and Liver in Swine with Dietetic Microangiopathy; Vitamin E, Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of, 509–510
Heart Disease, Ischemic, in Cross-Cultural Epidemiology; Plasma Vitamins E and Inversely Correlated to Mortality from, 268–282
Heart Injury, Oxygen Free Radical-Mediated, in Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol, 237–253
Heat-Labile and Glutathione Factor relative to Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in Hepatic Microsomes: Requirement for, 32–45

Heme-Related Metabolites relative to Photooxidative Inactivation of Membrane-Bound Enzymes: Pathological Significance of, 458–460
Hemorrhage, Periventricular, in Preterm Babies by Vitamin E Supplementation; Prophylaxis of, 197–204
Hepatic Cytosol; Tocopherol-Binding Proteins, 85–94
Hepatic Damage Caused by Ischemia-Reperfusion or Endotoxemia; Protective Effect of Administered α-Tocopherol against, 208–218
Hepatic Microsomes: Requirement for Glutathione and Heat-Labile Factor; Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in, 32–45
High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of Parkinson's Disease and Pilot Trial of, 186–196
High-Dose Radiochemotherapy Preceding Bone Marrow Transplantation; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
High-Dose Vitamin E relative to Bilateral Stage 3-Plus Retinopathy of Prematurity (ROP): Effect of Treatment (Rx) with, 464–466
Hypothesis, Endogenous Toxin, of Etiology of Parkinson's Disease and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness, 186–196

Illness; Endogenous Toxin Hypothesis of Etiology of Parkinson's Disease and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of, 186–196
Immune Dysfunctions, Retrovirus-Induced, and Tumor-Cell Proliferation; Vitamin E Modulation of, 470–473
Immune Response, Disease Resistance, and Vitamin E, 335–344
Immune Responsiveness of Aged; Effect of Vitamin E Supplementation on, 283–290
Immunosuppressive Effects of n-6 Polyunsaturated Fatty Acids; effect of Vitamin E on, 412–414
in Vitro, Radiolabeling Microsomes, with Tritiated Alpha-Tocopherol, 511–513
in Vitro and *in Vivo* Antioxidant; Vitamin E, 7–22
In Vitro Model to Assess Alpha-Tocopherol Efficacy: Protection against UV-Induced Lipid Peroxidation, 491–494
in Vivo and *in Vitro* Antioxidant; Vitamin E, 7–22
in Vivo Peroxidation Are Present in Tissues of Vitamin E-Deficient Rats and Dogs; Products of, 46–60
Inactivation, Photooxidative, of Membrane-Bound Enzymes: Pathological Significance of Heme-Related Metabolites, 458–460
Infants
  Newborn, and Sickle Cell Disease Patients; Vitamin E and Membrane Abnormalities in Red Cells of, 461–463
  Preterm
    during First Year of Life; Vitamin E in, 443–446
    Pharmacokinetics of Intravenous Vitamin E in, 345–351
Infusion, Continuous Parenteral, of Vitamin E Pharmacokinetics and Bilirubin Production in Premature Neonates, 352–357
Ingestion, Alpha-Tocopherol, from Birth and Its Effects on Serum Androgens in Rats, 518–520
Inhibition
  of Oxidation of Biomembranes by Tocopherol, 23–31
  Synergistic, of Oxidation in RBC Ghosts by Vitamins C and E, 474–477
Injury
  Brain, after Ischemia and Trauma: Role of Vitamin E, 219–236
  Ischemia-Reperfusion: Cardiovascular Disease, 208–282
  Oxygen Free Radical-Mediated Heart, in Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol, 237–253
Intake, Vitamin E, and Risk of Cataracts in Humans, 372–382
Interaction of Vitamin E and Glutathione in Protection against Membrane Lipid Peroxidation; Mechanism of, 514–517
Intracellular Transport and Membrane Function relative to Biochemistry, 85–145
Intravenous Vitamin E in Preterm Infants; Pharmacokinetics, 345–351

Ischemia and Trauma: Role of Vitamin E; Brain Injury after, 219–236
Ischemia-Reperfusion or Endotoxemia; Protective Effect of Administered α-Tocopherol against Hepatic Damage Caused by, 208–218
Ischemia-Reperfusion Injury: Cardiovascular Disease, 208–282
Ischemic Heart Disease in Cross-Cultural Epidemiology; Plasma Vitamins E and Inversely Correlated to Mortality from, 268–282
Isolated Rat Liver Nuclei; Vitamin E Prevents NADPH-Dependent but not NADH-Dependent Chemoluminescence, 503–505

Labeling, Spin; Mode of Action of Vitamin E as Antioxidant in Membranes as Studied by, 521–523
LDL, Human Oxidized, by Macrophages; Antioxidant Therapy and Uptake of, 447–448
Leakage, γ-Crystallin, and Preventing Cataracts from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in, 358–371
Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in Preventing Cataracts and γ-Crystallin Leakage from, 358–371
Leukocytes
  in Neonates; Tocopherol Concentrations, 487–490
  Polymorphonuclear, of Vitamin E-Deficient Rats; Increased Platelet-Activating Factor (PAF) Synthesis in, 449–454
Lipid Peroxidation
  Membrane; Mechanism of Interaction of Vitamin E and Glutathione in Protection against, 514–517
  Microsomal; Alpha-Tocopherol, 480–486
  UV-Induced, relative to *In Vitro* Model to Assess Alpha-Tocopherol Efficacy: Protection against, 491–494
Lipoperoxidation In Venous Stasis Ulcer: Beneficial Role of Vitamin E as Antioxidant; Biochemical Evidence of, 506–508
Lipoprotein Receptor, Low Density, for α-Tocopherol Delivery to Tissues; Role of, 61–71
Lipoproteins
  Human; α-Tocopherol as Compared with γ-Tocopherol Is Preferentially Secreted in, 95–108
  Low Density; Role of Vitamin E and Carotenoids in Preventing Oxidation of, 254–267
5-Lipoxygenase Pathway; Role of Vitamin E and Selenium on Arachidonic Acid Oxidation by way of, 136–145
Liver and Heart in Swine with Dietetic Microangiopathy; Vitamin E, Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of, 509–510
Liver Nuclei, Isolated Rat; Vitamin E Prevents NADPH-Dependent but not NADH-Dependent Chemoluminescence by, 503–505
Localization of α-Tocopherol in Membranes, 109–120
Lung under Oxidative Stress; Mobilization of Vitamin E to, 439–440
Lungs of Chronic Cigarette-Smoked Rats; Increased Vitamin E Content, 425–427
Lysophospholipids, Phospholipase A, and Free Fatty Acids; Tocopherol Stabilizes Membrane against, 121–135

Macrophages; Antioxidant Therapy and Uptake of Human Oxidized LDL, 447–448
Malabsorption
  Fat
    Neuropathies in Adults with or without, 170–175
    Studies in Cystic Fibrosis and Chronic Cholestasis; Vitamin E Deficiency Neuropathy in Children with, 156–169
Marrow Transplantation, High-Dose Radiochemotherapy Preceding Bone; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
Mechanism of Interaction of Vitamin E and Glutathione in Protection against Membrane Lipid Peroxidation, 514–517
Membrane
  Erythrocyte, in Presence of α-Tocopherol; Dynamic Properties of Phospholipid Bilayer of, 409–411
  Tocopherol Stabilizes, against Phospholipase A, Free Fatty

Acids, and Lysophospholipids, 121–135
Membrane and Vitamin E Abnormalities in Red Cells of Sickle Cell Disease Patients and Newborn Infants, 461–463
Membrane Damage, Activated Neutrophil-Induced, in Vitamin E-Deficient Erythrocytes, 428–430
Membrane Function and Intracellular Transport relative to Biochemistry, 85–145
Membrane Lipid Peroxidation; Mechanism of Interaction of Vitamin E and Glutathione in Protection against, 514–517
Membrane-Bound Enzymes: Pathological Significance of Heme-Related Metabolites; Photooxidative Inactivation of, 458–460
Membrane-Stabilizing Effect of Vitamin E, 524–526
Membranes
  as Studied by Spin Labeling; Mode of Action of Vitamin E as Antioxidant in, 521–523
  Human Erythrocyte, against Peroxidation; Cooperative Protection by Vitamins E and C of, 527–529
  Localization of α-Tocopherol, 109–120
Men, Scottish, relative to Low Plasma Vitamins E and C: Increased Risk of Angina in, 291–295
Metabolites, Heme-Related, relative to Photooxidative Inactivation of Membrane-Bound Enzymes: Pathological Significance of, 458–460
Microangiopathy, Dietetic; Vitamin E, Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of Heart and Liver in Swine with, 509–510
Microsomal Lipid Peroxidation; Alpha-Tocopherol, 480–486
Microsomes, Hepatic: Requirement for Glutathione and Heat-Labile Factor; Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in, 32–45
Microsomes *in Vitro*, Radiolabeling, with Tritiated Alpha-Tocopherol, 511–513
Mobilization of Vitamin E to Lung under Oxidative Stress, 439–440
Model
  Animal; Vitamin E and Cancer Prevention, 383–390
  In Vitro, to Assess Alpha-Tocopherol Efficacy: Protection against UV-Induced Lipid Peroxidation, 491–494
Modeling, Pharmacokinetic, and Bioavailability of *RRR* and *All-Racemic* Alpha-Tocopherol Acetate in Human Blood Components, 406–408
Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats, 358–371
Models and, Animal, during Bypass Surgery in Humans: Effects of α-Tocopherol; Oxygen Free Radical-Mediated Heart Injury in, 237–253
Modulation
  of Tissue Vitamin E Levels by Physical Exercise, 311–321
  Vitamin E, of Retrovirus-Induced Immune Dysfunctions and Tumor-Cell Proliferation, 470–473
Mortality
  Cancer, and Vitamin E Status, 391–399
  from Ischemic Heart Disease in Cross-Cultural Epidemiology; Plasma Vitamins E and Inversely Correlated to, 268–282
Movement Disorders, Neuroleptic-Induced: Evidence from Treatment of Tardive Dyskinesia with Vitamin E; Possible Involvement of Free Radicals in, 176–185
Myeloencephalopathy, Equine Degenerative; Vitamin E Deficiency as Causative Factor in, 415–416
Myeloperoxidase Release, Plasmatic, during Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status; Neutrophil Activation Evidenced by, 501–502

n-6 Polyunsaturated Fatty Acids; effect of Vitamin E on Immunosuppressive Effects of, 412–414
NADH-Dependent Chemoluminescence by Isolated Rat Liver Nuclei; Vitamin E Prevents NADPH-Dependent, 503–505
NADPH-Dependent, Vitamin E Prevents, but not NADH-Dependent Chemoluminescence by Isolated Rat Liver Nuclei, 503–505

Neonates
Premature; Continuous Parenteral Infusion of Vitamin E Pharmacokinetics and Bilirubin Production in, 352–357
Tocopherol Concentrations of Leukocytes, 487–490
Nervous System, 146–207
Neural Tissue; Role of Vitamin E, 146–155
Neuroleptic-Induced Movement Disorders: Evidence from Treatment of Tardive Dyskinesia with Vitamin E; Possible Involvement of Free Radicals in, 176–185
Neuropathies in Adults with or without Fat Malabsorption, 170–175
Neuropathy, Vitamin E Deficiency, in Children with Fat Malabsorption: Studies in Cystic Fibrosis and Chronic Cholestasis, 156–169
Neutrophil Activation Evidenced by Plasmatic Myeloperoxidase Release during Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status, 501–502
Neutrophil-Induced Membrane Damage, Activated, in Vitamin E-Deficient Erythrocytes, 428–430
Newborn Infants and Sickle Cell Disease Patients; Vitamin E and Membrane Abnormalities in Red Cells of, 461–463
Nonsmokers and Smokers: Effects of Vitamin E Supplementation; Antioxidant Status of, 435–438
Nuclei, Isolated Rat Liver; Vitamin E Prevents NADPH-Dependent but not NADH-Dependent Chemoluminescence by, 503–505
Nutritional Assessment of Vitamin E in Oxidative Stress, 296–310

Oxidation
Arachidonic Acid, by way of 5-Lipoxygenase Pathway; Role of Vitamin E and Selenium on, 136–145
in RBC Ghosts by Vitamins C and E; Synergistic Inhibition of, 474–477
of Biomembranes by Tocopherol; Inhibition of, 23–31
Preventing, of Low Density Lipoproteins; Role of Vitamin E and Carotenoids in, 254–267
Oxidative Stress
Mobilization of Vitamin E to Lung under, 439–440
Nutritional Assessment of Vitamin E, 296–310
Oxidized LDL, Human, by Macrophages; Antioxidant Therapy and Uptake of, 447–448
Oxygen Free Radical-Mediated Heart Injury in Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol, 237–253
Oxygen-Induced Retinopathy in Rat: Role of Vitamin E in Defending against Peroxidation, 495–497

Parenteral Infusion, Continuous, of Vitamin E Pharmacokinetics and Bilirubin Production in Premature Neonates, 352–357
Parkinson's Disease
and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of, 186–196
Retrospective Evaluation of Vitamin E Therapy, 441–442
Pathological Significance of Heme-Related Metabolites relative to Photooxidative Inactivation of Membrane-Bound Enzymes, 458–460
Pathway, 5-Lipoxygenase; Role of Vitamin E and Selenium on Arachidonic
Patients
Sickle Cell Disease, and Newborn Infants; Vitamin E and Membrane Abnormalities in Red Cells of, 461–463
with Adult Respiratory Distress Syndrome; Evaluation of Vitamin E Deficiency in, 498–500
Periventricular Hemorrhage in Preterm Babies by Vitamin E Supplementation; Prophylaxis of, 197–204
Peroxidase, Glutathione, Polyunsaturated Fatty Acid Concentrations, and Vitamin E of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
Peroxidation
Cooperative Protection by Vitamins E and C of Human Erythrocyte Membranes against, 527–529
in Vivo, Are Present in Tissues of Vitamin E-Deficient Rats and Dogs; Products of, 46–60
Membrane Lipid; Mechanism of Interaction of Vitamin E and Glutathione in Protection against, 514–517

Microsomal Lipid; Alpha-Tocopherol, 480–486
relative to Oxygen-Induced Retinopathy in Rat: Role of Vitamin E in Defending against, 495–497
UV-Induced Lipid, relative to *In Vitro* Model to Assess Alpha-Tocopherol Efficacy: Protection against, 491–494
Pharmacokinetic Modeling and Bioavailability of *RRR* and *All-Racemic* Alpha-Tocopherol Acetate in Human Blood Components, 406–408
Pharmacokinetics
of Intravenous Vitamin E in Preterm Infants, 345–351
Vitamin E, and Bilirubin Production in Premature Neonates; Continuous Parenteral Infusion of, 352–357
Phospholipase A, Free Fatty Acids, and Lysophospholipids; Tocopherol Stabilizes Membrane against, 121–135
Phospholipid Bilayer of Erythrocyte Membrane in Presence of α-Tocopherol; Dynamic Properties of, 409–411
Photooxidative Inactivation of Membrane-Bound Enzymes: Pathological Significance of Heme-Related Metabolites, 458–460
Physical Exercise; Modulation of Tissue Vitamin E Levels, 311–321
Pig, Stress-Susceptible: Effect of Vitamin E Supplementation; Antioxidant Abnormality in, 322–334
Pilot Trial and Parkinson's Disease of High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of, 186–196
Plasmatic Myeloperoxidase Release during Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status; Neutrophil Activation Evidenced by, 501–502
Platelet-Activating Factor (PAF) Synthesis, Increased, in Polymorphonuclear Leukocytes of Vitamin E-Deficient Rats, 449–454
3-Plus Retinopathy, Bilateral Stage, of Prematurity (ROP): Effect of Treatment (Rx) with High-Dose Vitamin E, 464–466
Polymorphonuclear Leukocytes of Vitamin E-Deficient Rats; Increased Platelet-Activating Factor (PAF) Synthesis, 449–454
Polyunsaturated Fatty Acid Concentrations, Vitamin E, and Glutathione Peroxidase of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
Polyunsaturated Fatty Acids, n-6; effect of Vitamin E on Immunosuppressive Effects of, 412–414
Preceding Bone Marrow Transplantation, High-Dose Radiochemotherapy; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
Preferentially Secreted in Human Lipoproteins; α-Tocopherol as Compared with γ-Tocopherol Is, 95–108
Premature Neonates; Continuous Parenteral Infusion of Vitamin E Pharmacokinetics and Bilirubin Production, 352–357
Prematurity (ROP): Effect of Treatment (Rx) with High-Dose Vitamin E; Bilateral Stage 3-Plus Retinopathy of, 464–466
Preterm Babies by Vitamin E Supplementation; Prophylaxis of Periventricular Hemorrhage in, 197–204
Preterm Infants
during First Year of Life; Vitamin E in, 443–446
Pharmacokinetics of Intravenous Vitamin E, 345–351
Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of Vitamin E and Esters in, 358–371
Preventing Oxidation of Low Density Lipoproteins; Role of Vitamin E and Carotenoids in, 254–267
Prevention, Vitamin E and Cancer, in Animal Model, 383–390
Prevents NADPH-Dependent, Vitamin E, but not NADH-Dependent Chemoluminescence by Isolated Rat Liver Nuclei, 503–505
Problems, 358–405
Production, Bilirubin, and Vitamin E Pharmacokinetics in Premature Neonates; Continuous Parenteral Infusion of, 352–357
Progression, Slow, of Illness; Endogenous Toxin Hypothesis of Etiology of Parkinson's Disease and Pilot

Trial of High-Dosage Antioxidants in Attempt to, 186–196
Proliferation, Tumor-Cell, and Retrovirus-Induced Immune Dysfunctions; Vitamin E Modulation of, 470–473
Prophylaxis of Periventricular Hemorrhage in Preterm Babies by Vitamin E Supplementation, 197–204
Prostaglandin Biosynthesis, Biological Activity, and Tissue Uptake; Relationship of Tocopherol Structure to, 72–84
Protection
  against Environmental Stresses, 283–357
  against Membrane Lipid Peroxidation; Mechanism of Interaction of Vitamin E and Glutathione in, 514–517
  against UV-Induced Lipid Peroxidation relative to *In Vitro* Model to Assess Alpha-Tocopherol Efficacy, 491–494
  Cooperative, by Vitamins E and C of Human Erythrocyte Membranes against Peroxidation, 527–529
Protective Effect of Administered α-Tocopherol against Hepatic Damage Caused by Ischemia-Reperfusion or Endotoxemia, 208–218
Proteins
  Rats Fed Algal; Tissue α-Tocopherol, Thiobarbituric Acid-Reactive Substance (TBA-RS), and Glutathione Levels in, 478–479
  Tocopherol-Binding, of Hepatic Cytosol, 85–94

Radical-Mediated Heart Injury, Oxygen Free, in Animal Models and during Bypass Surgery in Humans: Effects of α-Tocopherol, 237–253
Radicals
  Free
    in Hepatic Microsomes: Requirement for Glutathione and Heat-Labile Factor; Evidence That Alpha-Tocopherol Functions Cyclically to Quench, 32–45
    in Neuroleptic-Induced Movement Disorders: Evidence from Treatment of Tardive Dyskinesia with Vitamin E; Possible Involvement of, 176–185
Radiochemotherapy Preceding Bone Marrow Transplantation, High-Dose; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
Radiolabeling Microsomes *in Vitro* with Tritiated Alpha-Tocopherol, 511–513
RBC Ghosts by Vitamins C and E; Synergistic Inhibition of Oxidation in, 474–477
Receptor, Low Density Lipoprotein, for α-Tocopherol Delivery to Tissues; Role of, 61–71
Red Cells of Sickle Cell Disease Patients and Newborn Infants; Vitamin E and Membrane Abnormalities, 461–463
Release, Plasmatic Myeloperoxidase, during Cardiopulmonary Bypass in Humans: Consequence on Vitamin E Status; Neutrophil Activation Evidenced by, 501–502
Requirement for Glutathione and Heat-Labile Factor relative to Evidence That Alpha-Tocopherol Functions Cyclically to Quench Free Radicals in Hepatic Microsomes, 32–45
Resistance, Disease, Vitamin E, and Immune Response, 335–344
Respiratory Distress Syndrome, Adult; Evaluation of Vitamin E Deficiency in Patients with, 498–500
Responsiveness, Immune, of Aged; Effect of Vitamin E Supplementation on, 283–290
Restriction, Dietary, on Weight and Alpha-Tocopherol Concentration of Tissues in Rats; Effects of, 455–457
Retinopathy
  Bilateral Stage 3-Plus, of Prematurity (ROP): Effect of Treatment (Rx) with High-Dose Vitamin E, 464–466
  Oxygen-Induced, in Rat: Role of Vitamin E in Defending against Peroxidation, 495–497
Retrospective Evaluation of Vitamin E Therapy in Parkinson's Disease, 441–442
Retrovirus-Induced Immune Dysfunctions and Tumor-Cell Proliferation; Vitamin E Modulation, 470–473
Risk
  and Vitamin E Intake of Cataracts in Humans, 372–382
  Increased, of Angina in Scottish Men relative to Low Plasma Vitamins E and C, 291–295

RRR and *All-Racemic* Alpha-Tocopherol Acetate in Human Blood Components; Pharmacokinetic Modeling and Bioavailability, 406–408

Secreted, Preferentially, in Human Lipoproteins; α-Tocopherol as Compared with γ-Tocopherol Is, 95–108
Selective Damage to Cardiac Conduction System in Vitamin E- and Selenium-Deficient Calves, 467–469
Selenium and Vitamin E on Arachidonic Acid Oxidation by way of 5-Lipoxygenase Pathway; Role of, 136–145
Selenium-Deficient Calves and Vitamin E-; Selective Damage to Cardiac Conduction System in, 467–469
Serum Androgens in Rats; Alpha-Tocopherol Ingestion from Birth and Its Effects on, 518–520
Sickle Cell Disease Patients and Newborn Infants; Vitamin E and Membrane Abnormalities in Red Cells of, 461–463
Smokers and Nonsmokers: Effects of Vitamin E Supplementation; Antioxidant Status of, 435–438
Spin Labeling; Mode of Action of Vitamin E as Antioxidant in Membranes as Studied by, 521–523
Stabilizes Membrane, Tocopherol, against Phospholipase A, Free Fatty Acids, and Lysophospholipids, 121–135
Stage 3-Plus Retinopathy, Bilateral, of Prematurity (ROP): Effect of Treatment (Rx) with High-Dose Vitamin E, 464–466
Stasis Ulcer, Venous: Beneficial Role of Vitamin E as Antioxidant; Biochemical Evidence of Lipoperoxidation In, 506–508
Stress
  Oxidative
    Mobilization of Vitamin E to Lung under, 439–440
    Nutritional Assessment of Vitamin E in, 296–310
Stress-Susceptible Pig: Effect of Vitamin E Supplementation; Antioxidant Abnormality in, 322–334
Stresses, Environmental; Protection, 283–357
Studied by Spin Labeling; Mode of Action of Vitamin E as Antioxidant in Membranes as, 521–523
Substance (TBA-RS), Thiobarbituric Acid-Reactive, Glutathione Levels, and Tissue α-Tocopherol in Rats Fed Algal Proteins, 478–479
Supplementation
  Vitamin E
    on Immune Responsiveness of Aged; Effect of, 283–290
    Prophylaxis of Periventricular Hemorrhage in Preterm Babies by, 197–204
    relative to Antioxidant Abnormality in Stress-Susceptible Pig: Effect of, 322–334
    relative to Antioxidant Status of Smokers and Nonsmokers: Effects of, 435–438
Surgery, Bypass, in Humans: Effects of α-Tocopherol; Oxygen Free Radical-Mediated Heart Injury in Animal Models and during, 237–253
Swine with Dietetic Microangiopathy; Vitamin E, Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of Heart and Liver in, 509–510
Syndrome, Adult Respiratory Distress; Evaluation of Vitamin E Deficiency in Patients with, 498–500
Synergistic Inhibition of Oxidation in RBC Ghosts by Vitamins C and E, 474–477
Synthesis, Increased Platelet-Activating Factor (PAF), in Polymorphonuclear Leukocytes of Vitamin E-Deficient Rats, 449–454
System, Cardiac Conduction, in Vitamin E- and Selenium-Deficient Calves; Selective Damage to, 467–469

Tardive Dyskinesia with Vitamin E relative to Possible Involvement of Free Radicals in Neuroleptic-Induced Movement Disorders: Evidence from Treatment of, 176–185
(TBA-RS), Thiobarbituric Acid-Reactive Substance, Glutathione Levels, and Tissue α-Tocopherol in Rats Fed Algal Proteins, 478–479
Therapy
  Antioxidant, and Uptake of Human Oxidized LDL by Macrophages, 447–448

Vitamin E, in Parkinson's Disease; Retrospective Evaluation of, 441–442
Thiobarbituric Acid-Reactive Substance (TBA-RS), Glutathione Levels, and Tissue α-Tocopherol in Rats Fed Algal Proteins, 478–479
Tissue, Neural; Role of Vitamin E in, 146–155
Tissue α-Tocopherol, Thiobarbituric Acid-Reactive Substance (TBA-RS), and Glutathione Levels in Rats Fed Algal Proteins, 478–479
Tissue Uptake, Prostaglandin Biosynthesis, and Biological Activity; Relationship of Tocopherol Structure to, 72–84
Tissue Vitamin E Levels by Physical Exercise; Modulation, 311–321
Tissues
in Rats; Effects of Dietary Restriction on Weight and Alpha-Tocopherol Concentration of, 455–457
of Vitamin E-Deficient Rats and Dogs; Products of *in Vivo* Peroxidation Are Present in, 46–60
Role of Low Density Lipoprotein Receptor for α-Tocopherol Delivery to, 61–71
Tocopherol(s)
alpha
Acetate, *RRR* and *All-Racemic*, in Human Blood Components; Pharmacokinetic Modeling and Bioavailability of, 406–408
Administered, against Hepatic Damage Caused by Ischemia-Reperfusion or Endotoxemia; Protective Effect of, 208–218
and Beta-Carotene by High-Dose Radiochemotherapy Preceding Bone Marrow Transplantation; Decrease of, 431–434
and Weight Concentration of Tissues in Rats; Effects of Dietary Restriction on, 455–457
as Compared with γ-Tocopherol Is Preferentially Secreted in Human Lipoproteins, 95–108
Deuterium-Labeled, in Male Rats; Competitive Uptake of, 533–536
Dynamic Properties of Phospholipid Bilayer of Erythrocyte Membrane in Presence of, 409–411
Functions Cyclically to Quench Free Radicals in Hepatic Microsomes: Requirement for Glutathione and Heat-Labile Factor; Evidence That, 32–45
in Membranes; Localization, 109–120
in Microsomal Lipid Peroxidation, 480–486
relative to Oxygen Free Radical-Mediated Heart Injury in Animal Models and during Bypass Surgery in Humans: Effects of, 237–253
Tritiated; Radiolabeling Microsomes *in Vitro*, 511–513
Gamma
Is Preferentially Secreted in Human Lipoproteins; α-Tocopherol as Compared with, 95–108
Inhibition of Oxidation of Biomembranes by, 23–31
Stabilizes Membrane against Phospholipase A, Free Fatty Acids, and Lysophospholipids, 121–135
Tocopherol Concentrations of Leukocytes in Neonates, 487–490
Alpha-Tocopherol Delivery to Tissues; Role of Low Density Lipoprotein Receptor for, 61–71
Alpha-Tocopherol Efficacy, Assess: Protection against UV-Induced Lipid Peroxidation; *In Vitro* Model to, 491–494
Alpha-Tocopherol Ingestion from Birth and Its Effects on Serum Androgens in Rats, 518–520
Alpha-Tocopherol Tissue, Thiobarbituric Acid-Reactive Substance (TBA-RS), and Glutathione Levels in Rats Fed Algal Proteins, 478–479
Tocopherol Structure to Biological Activity, Tissue Uptake, and Prostaglandin Biosynthesis; Relationship of, 72–84
Tocopherol-Binding Proteins of Hepatic Cytosol, 85–94
Toxin Hypothesis, Endogenous, of Etiology of Parkinson's Disease and Pilot Trial of High-Dosage Antioxidants in Attempt to Slow Progression of Illness, 186–196
Transplantation, High-Dose Radiochemotherapy Preceding Bone Marrow; Decrease of Alpha-Tocopherol and Beta-Carotene, 431–434
Transport, Intracellular, and Membrane Function relative to Biochemistry, 85–145

Trauma and Ischemia: Role of Vitamin E; Brain Injury after, 219–236
Treatment of Tardive Dyskinesia with Vitamin E relative to Possible Involvement of Free Radicals in Neuroleptic-Induced Movement Disorders: Evidence from, 176–185
Treatment (Rx) with High-Dose Vitamin E relative to Bilateral Stage 3-Plus Retinopathy of Prematurity (ROP): Effect of, 464–466
Trial, Pilot, and Parkinson's Disease of High-Dosage Antioxidants in Attempt to Slow Progression of Illness; Endogenous Toxin Hypothesis of Etiology of, 186–196
Tritiated Alpha-Tocopherol; Radiolabeling Microsomes *in Vitro*, 511–513
Tumor-Cell Proliferation and Retrovirus-Induced Immune Dysfunctions; Vitamin E Modulation, 470–473

Ulcer, Venous Stasis: Beneficial Role of Vitamin E as Antioxidant; Biochemical Evidence of Lipoperoxidation In, 506–508
Uptake
  and Antioxidant Therapy of Human Oxidized LDL by Macrophages, 447–448
  Competitive, of Deuterium-Labeled α-Tocopherols in Male Rats, 533–536
  Tissue, Prostaglandin Biosynthesis, and Biological Activity; Relationship of Tocopherol Structure to, 72–84
UV-Induced Lipid Peroxidation relative to *In Vitro* Model to Assess Alpha-Tocopherol Efficacy: Protection against, 491–494

Venous Stasis Ulcer: Beneficial Role of Vitamin E as Antioxidant; Biochemical Evidence of Lipoperoxidation In, 506–508
Vitamin C
  and E; Synergistic Inhibition of Oxidation in RBC Ghosts by, 474–477
  and Low Plasma Vitamins E: Increased Risk of Angina in Scottish Men, 291–295
  and Vitamins E of Human Erythrocyte Membranes against Peroxidation; Cooperative Protection by, 527–529
Vitamin E
  Administered and Blood Level; Relationship between Dose of, 421–424
  and Cancer Prevention in Animal Model, 383–390
  and Carotenoids in Preventing Oxidation of Low Density Lipoproteins; Role of, 254–267
  and Esters in Preventing Cataracts and γ-Crystallin Leakage from Lenses in Diabetic Rats; Modeling Cortical Cataractogenesis: IX. Activity of, 358–371
  and Glutathione in Protection against Membrane Lipid Peroxidation; Mechanism of Interaction of, 514–517
  and Membrane Abnormalities in Red Cells of Sickle Cell Disease Patients and Newborn Infants, 461–463
  and Selenium on Arachidonic Acid Oxidation by way of 5-Lipoxygenase Pathway; Role of, 136–145
  and Vitamin C; Synergistic Inhibition of Oxidation in RBC Ghosts by, 474–477
  as Anticarcinogen, 417–420
  as Antioxidant
    in Membranes as Studied by Spin Labeling; Mode of Action of, 521–523
    relative to Biochemical Evidence of Lipoperoxidation In Venous Stasis Ulcer: Beneficial Role of, 506–508
  Glutathione Peroxidase, and Polyunsaturated Fatty Acid Concentrations of Heart and Liver in Swine with Dietetic Microangiopathy, 509–510
  High-Dose, relative to Bilateral Stage 3-Plus Retinopathy of Prematurity (ROP): Effect of Treatment (Rx) with, 464–466
  Immune Response, and Disease Resistance, 335–344
  in Defending against Peroxidation relative to Oxygen-Induced Retinopathy in Rat: Role of, 495–497
  in Neural Tissue; Role, 146–155
  in Oxidative Stress; Nutritional Assessment, 296–310
  in Preterm Infants during First Year of Life, 443–446
  Intravenous, in Preterm Infants; Pharmacokinetics of, 345–351

Introduction to Biochemistry and Health Benefits, 1–6
Low Plasma Vitamins, and C: Increased Risk of Angina in Scottish Men, 291–295
Membrane-Stabilizing Effect, 524–526
on Immunosuppressive Effects of n-6 Polyunsaturated Fatty Acids; effect of, 412–414
relative to Brain Injury after Ischemia and Trauma: Role of, 219–236
relative to Possible Involvement of Free Radicals in Neuroleptic-Induced Movement Disorders: Evidence from Treatment of Tardive Dyskinesia with, 176–185
Status of Current Research and Suggestions for Future Studies, 400–405
to Lung under Oxidative Stress; Mobilization of, 439–440
Vitamin E Content, Increased, in Lungs of Chronic Cigarette-Smoked Rats, 425–427
Vitamin E Deficiency
as Causative Factor in Equine Degenerative Myeloencephalopathy, 415–416
in Patients with Adult Respiratory Distress Syndrome; Evaluation of, 498–500
Vitamin E Deficiency Neuropathy in Children with Fat Malabsorption: Studies in Cystic Fibrosis and Chronic Cholestasis, 156–169
Vitamin E Intake and Risk of Cataracts in Humans, 372–382
Vitamin E Levels, Tissue, by Physical Exercise; Modulation of, 311–321
Vitamin E Modulation of Retrovirus-Induced Immune Dysfunctions and Tumor-Cell Proliferation, 470–473
Vitamin E Pharmacokinetics and Bilirubin Production in Premature Neonates; Continuous Parenteral Infusion of, 352–357
Vitamin E Prevents NADPH-Dependent but not NADH-Dependent Chemoluminescence by Isolated Rat Liver Nuclei, 503–505
Vitamin E Status
and Cancer Mortality, 391–399
relative to Neutrophil Activation Evidenced by Plasmatic Myeloperoxidase Release during Cardiopulmonary Bypass in Humans: Consequence on, 501–502
Vitamin E Supplementation
on Immune Responsiveness of Aged; Effect of, 283–290
Prophylaxis of Periventricular Hemorrhage in Preterm Babies by, 197–204
relative to Antioxidant Abnormality in Stress-Susceptible Pig: Effect of, 322–334
relative to Antioxidant Status of Smokers and Nonsmokers: Effects of, 435–438
Vitamin E Therapy in Parkinson's Disease; Retrospective Evaluation, 441–442
Vitamin E- and Selenium-Deficient Calves; Selective Damage to Cardiac Conduction System in, 467–469
Vitamin E-Deficient Erythrocytes; Activated Neutrophil-Induced Membrane Damage, 428–430
Vitamin E-Deficient Rats; Increased Platelet-Activating Factor (PAF) Synthesis in Polymorphonuclear Leukocytes, 449–454
Vitamins C and E
Low Plasma: Increased Risk of Angina in Scottish Men, 291–295
of Human Erythrocyte Membranes against Peroxidation; Cooperative Protection by, 527–529
Synergistic Inhibition of Oxidation in RBC Ghosts by, 474–477
Vitamins E and A; Plasma, Inversely Correlated to Mortality from Ischemic Heart Disease in Cross-Cultural Epidemiology, 268–282

Weight and Alpha-Tocopherol Concentration of Tissues in Rats; Effects of Dietary Restriction on, 455–457

INDEX OF CONTRIBUTORS

Abbasi, S., 345–351, 464–466
Accurso, F., 156–169
Acuff, R. V., 406–408
Airriess, G. R., 425–427
Albertini, A., 237–253
Almada, A. L., 311–321
Ando, Y., 458–460
Angel, M. F., 506–508
Araiso, T., 409–411
Aranda, F. J., 109–120
Arthur, J. R., 322–334, 435–438

Barklund, P. M., 283–290
Basford, R. A., 506–508
Bendich, A., 412–414
Berberan-Santos, M. N., 109–120
Bertrand, Y., 498–500
Bhutani, V. K., 345–351
Blumberg, J. B., 283–290
Blythe, L. L., 415–416
Boffa, G. M., 237–253
Borek, C., 417–420
Bowden Jr. F. W., 464–466
Brin, M. F., 421–424
Brubacher, G., 391–399
Brueggemann, G., 32–45
Burgess, J. R., 136–145
Burton, G. W., 7–22, 533–535
Butler-Simon, N., 156–169

Cadet, J. L., 176–185
Cannon, J. G., 283–290
Cederbaum, A. I., 503–505
Changchit, C., 425–427
Chiswick, M., 197–204
Chiu, D., 428–430
Chow, C. K., 425–427
Claster, S., 428–430
Clavey, V., 447–448
Clemens, M. R., 431–434
Cochran, G. S., 470–473
Cohn, W., 61–71
Condorelli, E., 237–253
Coutinho, A., 109–120
Craig, A. M., 415–416
Curello, S., 237–253

Daigneault, E. A., 406–408
Davies, J., 197–204
Deby, C., 498–500, 501–502
Deby-Dupont, G., 501–502
Delivoria-Papadopoulos, M., 464–466
de Lumen, B., 428–430
Denis, B., 498–500
Desai, I. D., 443–446
Diplock, A. T., 72–84
Dohi, K., 208–218
Donner, A. P., 372–382
Dratz, E. A., 46–60
Duthie, G. G., 322–334, 435–438
Dzialoszynski, T., 358–371

Ehninger, G., 431–434
Eichholzer, M., 391–399
Einsele, H., 431–434
El-Saadani, M., 254–267
Elsayed, N. M., 439–440
Elton, R., 291–295
Eskew, M. L., 136–145
Esterbauer, H., 254–267

Factor, S. A., 441–442
Fahn, S., 186–196, 421–424
Farnsworth, C. C., 46–60
Faymonville, M-L., 501–502
Ferguson II, J. E., 352–357
Ferlin, M. L. S., 443–446
Ferrari, R., 237–253
Ferslew, K. E., 406–408
Finkelstein, J. N., 511–513
Flaster, E., 421–424
Fruchart, J. C., 447–448
Fukuzawa, K., 449–454
Futrell, J. W., 506–508

Gale, R., 352–357
Gerdes, J. S., 345–351
Gey, K. F., 268–282, 291–295, 391–399, 431–434
Gladman, G., 197–204
Goldstein, P. J., 518–520
Gomez-Fernandez, J. C., 109–120
Gonçalves, A. L., 443–446
Goss-Sampson, M. A., 146–155
Graham, K. S., 514–517
Grundel, E., 478–479
Guarnieri, G., 237–253
Gumpricht, E., 514–517

Hammond, K., 156–169
Hanique, G., 498–500
Heubi, J. E., 156–169
Heyman, M., 156–169
Hildenbrandt, G., 136–145
Hirahara, F., 455–457
Huggins, E. R., 470–473
Hultgren, B. D., 415–416

Iannaccone, S. T., 156–169
Ingold, K. U., 7–22, 533–535
Inoue, M., 458–460

Jain, S. K., 461–463
James, W. P. T., 435–438
Jenkins, M. Y., 478–479
Jensen, B. K., 345–351
Johnson, L. H., 345351, 464–466
Johnson, L., 345–351
Jorge, S. M., 443–446
Jürgens, G., 254–267

Kagan, V. E., 121–135
Kaplowitz, N., 85–94
Kawamura, N., 487–490
Kawasaki, T., 208–218
Kayden, H. J., 95–108, 170–175
Kennedy, S., 467–469, 509–510
Kim, E-K., 491–494
Kitagawa, M., 487–490
Kline, K., 470–473
Komuro, E., 23–31
Koyama, T., 409–411
Kuhlenkamp, J., 85–94
Kuhn, H., 61–71
Kurotori, Y., 449–454

Ladner, C., 431–434
Lai, E. K., 32–45
Lamy, M., 501–502
Landvik, S.,1–6
Lassen, E. D., 415–416
Leenaerts, L., 498–500
Lenert, L. A., 352–357
Leonard, M. B., 352–357
Levy, J., 156–169
Li, D.-H., 383–390
Linklater, H. A., 358–371
Liu, S., 283–290
Loew, E. C., 46–60
Loftus, S., 421–424
Lohr, J. B., 176–185
Lubin, B., 428–430
Lüdin, E., 391–399

Machlin, L. J., xiii
Macintyre, C. C. A., 291–295
Maes, D., 491–494
Manimekalai, S., 518–520
Martinez, F. E., 443–446
Marubayashi, S., 208–218
Matsuo, M., 524–526
Mavis, R. D., 511–513
McCay, P. B., 32–45
McClung, H. J., 156–169
McMahon, D., 421–424
Meydani, M., 283–290
Meydani, S. N., 283–290
Micol, V., 109–120
Miki, M., 296–310, 474–477
Miller, R. A., 283–290
Mino, M., 296–310, 474–477, 487–490
Mintz-Hittner, H., 205–207
Mitchell, G. V., 478–479
Mitton, K. P., 358–371
Miyake, M., 296–310, 487–490
Miyama, Y., 23–31
Morgan, T. J., 470–473
Motoyama, T., 474–477
Muller, D. P. R., 146–155
Murphy, M. E., 480–486

Narayanan, K., 506–508
Niki, E., 23–31, 521–523
Nixon, B., 383–390

Oberreither, S., 254–267
Ogihara, T., 296–310, 487–490
Okikiola, M., 72–84
Oliver, M. F., 291–295
Op den Kamp, J. A. F., 527–529
Orcutt, R. H., 406–408
Ortiz, A., 109–120

Packer, L., 1–6, 311–321
Padulo, G. A., 491–494
Pasini, E., 237–253
Peckham, G., 464–466
Pelle, E., 491–494
Penn, J. S., 495–497
Perrault, J., 156–169
Pincemail, J., 498–500, 501–502
Plancke, M. O., 447–448
Powell, S. R., 32–45
Prieto, M. J. E., 109–120
Pryor, W. A., 400–405
Puhl, H., 254–267
Puntarulo, S., 503–505
Purewal, M., 383–390
Puska, P., 268–282

Quinn, G. E., 464–466
Quintanilha, A., 428–430

Ramasastry, S. S., 506–508
Rao, A., 470–473
Reddanna, P., 136–145
Reddy C. C., 136–145, 514–517
Ren, I., 85–94
Rice, D. A., 467–469, 509–510
Riely, C., 156–169
Riemersma, R. A., 291–295
Robertson, J. M., 372–382

Robey-Bond, S. M., 511–513
Rocklin, R., 283–290
Roelofsen, B., 527–529
Rotheneder, M., 254–267
Rothfuss, L. M., 311–321

Sanders, B. G., 470–473
Sanford, S. E., 358–371
Sauzieres, J., 447–448
Schmidt, H., 431–434
Scholich, H., 480–486
Scholz, R. W., 136–145, 514–517
Sies, H., 480–486
Silverman, A., 156–169
Sinatra, F., 156–169
Sinha, S., 197–204
Slitsky, B., 85–94
Smith, W. P., 491–494
Sokol, R. J., 156–169
Soltysiak-Pawluczuk, D., 383–390
Stähelin, H. B., 391–399
Stanton, P. E., 406–408
Steffen, H., 530–532
Stephens, R. J., 46–60
Stevenson, D. K., 352–357
Stolz, A., 85–94
Striegl, G., 254–267
Sugino, K., 208–218
Sundaram, S. G., 518–520

Takahashi, M., 23–31, 521–523
Tamai, H., 487–490
Tengerdy, R. P., 335–344
Thedford, S. S., 406–408
Thirion, A., 501–502
Thomas, D. W., 46–60
Thum, L. A., 495–497
Tokumura, A., 449–454
Toner, N., 197–204
Traber, M. G., 95–108, 170–175
Trevithick, J. R., 358–371, 372–382
Tsuchiya, J., 521–523
Tsukatani, H., 449–454

Urano, S., 524–526

Van Deenen, L. L. M., 527–529
van den Berg, J. J. M., 527–529
Vankeerberghen, L., 498–500
van Kuijk, F. J. G. M., 46–60
Villalain, J., 109–120
Vint, H. M., 435–438
Vreman, H. J., 352–357

Waller, H. D., 431–434
Wang, Y.-M., 383–390
Wefers, H., 480–486
Weimann, B. J., 530–532
Weiner, W. J., 441–442
Weiser, H., 530–532
Whelan, J., 136–145
Wilson, D. S., 311–321
Wood, D. A., 291–295

Xu, G.-L., 72–84

Yamamoto, Y., 23–31
Yeow, C.-L., 72–84
Yoshida, H., 85–94
Yoshida, S., 219–236

Zahalka, H. A., 533–535
Zarkower, A., 136–145